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FACT SHEET

FINAL AIR TOXICS RULE FOR THE MINERAL WOOL PRODUCTION INDUSTRY

TODAY'S ACTION...

- The Environmental Protection Agency (EPA) is issuing a final regulation to reduce emissions of air toxics from the mineral wool production industry. Air toxics, also known as hazardous air pollutants, are those pollutants that are known or suspected of causing cancer or other serious health and environmental effects.

- Mineral wool is a fibrous glassy substance made from natural rock and/or blast furnace slag. It is used as a structural and industrial insulation, and in other products where the fiber is added to provide structural strength, sound absorbency, or fire resistance. Air toxics are released during the production of mineral wool.

WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?

- EPA's regulation will reduce emissions of metal air toxics and particulate matter from cupolas, and formaldehyde and phenol from curing ovens. When implemented, this regulation will reduce emissions from these mineral wool production processes by about 260 tons annually. This represents a 76 percent reduction from current levels of these air pollutants.

- All of these air toxics reduced by today's rule can cause adverse health effects following exposure. Additionally, arsenic is a known human carcinogen, and beryllium, cadmium, lead, and formaldehyde are considered probable human carcinogens.

BACKGROUND

- Under the Clean Air Act Amendments of 1990, EPA is required to regulate sources of 188 listed toxic air pollutants. (Note that this list originally contained 189 pollutants, but EPA has subsequently removed the chemical caprolactam from the list.) On July 16, 1992, EPA published a list of industrial source categories that emit one or more of these air toxics. For listed categories of "major" sources (those that emit ten tons/year or more of a listed pollutant or twenty-five tons/year or more of a combination of listed pollutants), the Clean Air Act requires EPA to develop standards that require the application of stringent air pollution controls, known as maximum achievable control technology.

- EPA's published list of industry categories to be regulated includes major sources or

facilities that produce mineral wool. The proposed regulation was published in the Federal Register on May 8, 1997 (62 FR 25370).

- A supplement to the proposed regulation was proposed in the Federal Register on February 12, 1999 (64 FR 7149). The EPA will give careful consideration to all comments on the supplemental proposal and will amend the final regulation in a future action as appropriate.

WHO WILL BE AFFECTED BY EPA'S RULE?

- There are currently fifteen mineral wool production facilities nationwide that will be affected by today's rule.

- Although EPA does not anticipate construction of any new cupolas or curing ovens during the first five years of implementation of the regulation, the rule would also apply to any similar facilities built in the future.

WHAT DOES EPA'S RULE REQUIRE?

- In the mineral wool production process, rock and/or blast furnace slag, along with other secondary raw materials, are melted in a furnace known as a cupola using coke as fuel. The molten material is then formed into fiber. In the production of mineral wool products that do not require high rigidity, an oil is typically applied to suppress dust and add some strength to the fiber. The fiber is then sized and bagged or baled. For mineral wool products requiring a higher structural rigidity, a phenol/formaldehyde-based binder is applied to the fiber. The binder-laden fiber mat is then thermoset in a curing oven and cooled.

- EPA's rule regulates emissions of metal hazardous air pollutants (air toxics) from existing and new cupolas, using particulate matter as a surrogate for these metal hazardous air pollutants. Additionally, for new cupolas, EPA is establishing emission standards using carbon monoxide as a surrogate for the hazardous air pollutant carbonyl sulfide. Emission reductions required by the rule may be achieved through the use of two control devices, a fabric filter for each existing cupola or a thermal incinerator in addition to a fabric filter for each new cupola.

- EPA's rule also establishes an emission limit for formaldehyde, a hazardous air pollutant and a surrogate for phenol emissions, for existing and new curing ovens. Existing and new curing ovens may achieve emissions reductions required by the rule through use of a thermal incinerator.

- Owners and operators also have to comply with the monitoring, record keeping, and reporting requirements that are outlined in the rule.

- EPA's rule provides flexibility to industry by offering a choice of compliance options (emission limits or percent reduction limits) and by using surrogate pollutants to reduce the monitoring and emissions testing costs.

HOW MUCH WILL TODAY'S RULE COST?

- EPA estimates nationwide capital and annualized costs attributable to the rule to be $2.6 million and $1.4 million, respectively, for existing sources.

FOR FURTHER INFORMATION...

- Interested parties can download the rule from EPA's website on the Internet under "recent actions" at: *http://www.epa.gov//ttn/oarpg*. For further information about today's rule, contact Mary Johnson of EPA's Office of Air Quality Planning and Standards at (919) 541-5025.

- EPA's Office of Air and Radiation's home page on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The Office of Air and Radiation's home page address is: *http://www.epa.gov/oar.*